

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Hirofumi HAMADA et al.  
Title: METHOD OF DIFFERENTIATING MESENCHYMAL  
STEM CELL INTO LIVER CELL AND ARTIFICIAL  
HUMAN LIVER CELL  
Intl. Appl. No.: PCT/JP2004/002440 filed 02/27/2004  
Appl. No.: Unassigned  
Filing Date: 2/24/2006  
Examiner: Unassigned  
Art Unit: Unassigned

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the date of entry of the national stage as set forth in 37 CFR §1.491.

**RELEVANCE OF EACH DOCUMENT**

Documents A1-A4 listed on the attached PTO/SB/08 were cited as being relevant during the prosecution of the corresponding International application. A copy of the International Search Report is attached setting forth the portion of each document considered relevant by the examiner. Document A5 is applicant's declaration on non-prejudicial disclosures and exception to lack of novelty. A partial English-language translation of the foreign-language document is provided.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 19-0741.

Respectfully submitted,

Date 24 February 2006

By S. A. Bent

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MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

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APR 10 2006  
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date Submitted: February 24, 2006

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	Unassigned
Filing Date	2/24/2006
First Named Inventor	Hirofumi HAMADA
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	081356-0257

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A1	ALISON, M. R., et al., "Haptocytes from non-hepatic adult stem cells", Nature, vol. 406, p. 257 (2000).	
	A2	BARRY, F. P., et al., "Biology and Clinical Applications of Mesenchymal Stem Cells", Birth Defects Research Part C, vol. 69, pp. 250-256 (2003).	
	A3	PETERSEN, B. E., et al., "Bone Marrow as a Potential Source of Hepatic Ocal Cells", Science, vol. 284, pp. 1168-1170 (1999).	
	A4	TUAN, R. S., et al., "Adult mesenchymal stem cells and cell-based issue engineering", Arthritis Research and Therapy, vol. 5, no. 1, pp. 32-45 (2002).	
	A5	SATO, Y., et al., "Differentiation of human fbone marrow mesenchymal stem cells into hepatocytes", Regenerative Medicine-Journal of The Japanese Society for Regenerative Medicine, Extra Number, vol. 2/suppl. 2003.2 (Feb. 28, 2003).	

Examiner Signature

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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